



Image

2829

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Kazunori SAKURAI

Group Art Unit: 2829

Application No.: 09/987,409

Examiner: L. Kilday

Filed: November 14, 2001

Docket No.: 111109

For: SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THEREOF,
CIRCUIT BOARD, AND ELECTRONIC INSTRUMENT

APPLICANTS SUMMARY OF INTERVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

On September 5, 2003, an interview was held with Examiner Kilday and Applicant's representative David Cho, the undersigned.

Applicant wishes to express his appreciation to Examiner Kilday for the courtesies extended to Applicant's representative at the interview.

The purpose of the interview was to discuss the Office Action mailed May 22, 2003 and the Amendment filed August 20, 2003 in response thereto. No exhibit was shown. The discussion was made, referencing Figures 1A-1C of the application, and the references to Sakamoto JP 2000-174044 and Imasu et al., U.S. Patent 6,208,525. Primary emphasis of the discussion was directed to independent claims 1 and 18.

Applicant's representative argued that Sakamoto fails to disclose a step of melting the base substrate while bumps provided on the semiconductor chip are pressed into the base substrate, and the step of electrically connecting the bumps to the interconnecting lines, as recited in claims 1 and 18. In particular, Applicant's representative argued that Sakamoto

fails to disclose or even mention the process of pressing the bumps and semiconductor chip together because Sakamoto discloses the semiconductor device is mounted to the substrate by melting the solder bumps so that the resin flows into the gap between the semiconductor device and the substrate. Further, Applicant's representative also argued that Sakamoto fails to disclose any interconnecting lines with connecting portions which are electrically connected with the bumps.

The Examiner indicated that she would further consider the arguments, and stated that an updated search would be required to determine whether the application was in condition for allowance

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
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David J. Cho
Registration No. 48,078

JAO:DJC/brc

Date: September 15, 2003

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